FIG.1

```
        10         20         30         40         50         60
ATTTAGTTATAAAATGTTGCTATTTGTTGATCTAGTGCTCTGAATCTTTTAGTGAGGCAG
        70         80         90        100        110        120
ATGATGAAGATTATGAATTTCTTCATGAAATTATTGTAAGAAAAAGAACATAGAGAAGCT
       130        140        150        160        170        180
GCGGAATGAAAGTACACTGTTCTTTCACGGAGAAAGAAGATAAATAAGCATTATCTTCTT
       190        200        210        220        230        240
CTTCAGTTTTTAACACACATTTTGGAAATTTTGATGTAAAAATTCTCTTTGGAACGTTGT
       250        260        270        280        290        300
GTTGTCTGAAATCTTCCCAAAGGTTCTATCAGAAGAAGAAGGATAAAGTTTCATAGAAAC
       310        320        330        340        350        360
CCAATGGACAACAACAACAACAACAACACTTTTAGTTCTCTGGATAATGTCATGACTAAC
       370        380        390        400        410        420
CAAAATCCTCTTCTCATGGATTTTATACCTTCAAGAGAAGATTCAACTTCATTCTCAACA
       430        440        450        460        470        480
ATGCTTCCATGGAATACCATCAGATCAGATCCTCTACAAATGGGTGGCTTTGATATTTTC
       490        500        510        520        530        540
AATTCTATGCTGACTAACAAATACTTATCATCTTCTCCACGGTCTATCGATGTTCAAGAT
       550        560        570        580        590        600
AACCGCAATGTTGAGTTCATGGCTCCTCCTCCTCATCCTCCTCCACTTCATCCTTTGGAT
       610        620        630        640        650        660
CATTTAAGACACTATGATGATTCCTCAAACAACATGTGGGGTTTTGAAGCAAATAGTGAG
       670        680        690        700        710        720
TTTCAGGCATTTTCAGGTGTAGTTGGTCCAAGTGAACCAATGATGTCTACATTCGGTGAA
```

FIG. 1(CONTD)

```
       730        740        750        760        770        780
GAAGATTTCCCGTTTCTAATTTCGAATAAAAGAAACAATGAGCTTTCATTGAGTCTTGCA
       790        800        810        820        830        840
TCAGATGTTTCTGATGAATGCTCGGAGATAAGTCTTTGTGCAGCTACAAGATTAGCCTCA
       850        860        870        880        890        900
GAGCAAGCTTCTTGCAGCAGCAAAGACATTTCTAATAACGTTGTTACTCAAGGTTTCTCT
       910        920        930        940        950        960
CAACTTATATTTGGCTCAAAATACCTTCACTCTGTTCAAGAAATACTATCTCATTTCGCC
       970        980        990       1000       1010       1020
GCATACTCGCTCGATTATTCATCTCGAGGAACCGAGTCAGGAGCTGCTAGTTCAGCCTTT
      1030       1040       1050       1060       1070       1080
ACTTCACGTTTTGAGAATATAACTGAGTTTCTTGATGGTGATTCTAATAACTCGGAGGCG
      1090       1100       1110       1120       1130       1140
GGTTTCGGATCTACATTTCAAAGGAGAGCATTAGAAGCAAAGAAAACCCATCTCTTGGAT
      1150       1160       1170       1180       1190       1200
CTTCTTCAAATGGTGGATGATCGATATAGTCATTGCGTAGATGAGATTCATACGGTTATA
      1210       1220       1230       1240       1250       1260
TCAGCGTTCCATGCTGCAACCGAGTTAGATCCACAGTTACACACCCGGTTTGCCCTCCAA
      1270       1280       1290       1300       1310       1320
ACCGTTTCCTTCTTATACAAGAACCTGAGAGAGAGAATCTGCAATAATATAATCTCTATG
      1330       1340       1350       1360       1370       1380
GGATCTGTATTGGAGAGAGGCAAAGACAAGACTCAAGAAACCTCTATGTTCCACCAGCAT
      1390       1400       1410       1420       1430       1440
```


PCT/IB98/00821

09/423575

TGCCTTCTTCAGCAGCTGAAACGAAAGAACCATCAGATTTGGAGACCTCAACGAGGTTTG

1450 1460 1470 1480 1490 1500

CCTGAGAAATCTGTTTCGGTTCTACGGAATTGGATGTTCCAAAACTTCCTTCACCCTTAC

1510 1520 1530 1540 1550 1560

CCGAAAGATTCGGAGAAACATCTTCTAGCTATACGAAGTGGCTTGACAAGAAGTCAGGTA

1570 1580 1590 1600 1610 1620

TCAAACTGGTTTATAAATGCGCGGGTTAGGCTATGGAAGCCGATGATAGAAGAGATGTAT

1630 1640 1650 1660 1670 1680

GCGGAAATGAACAAGAGGAAGCTCAATAACAGTCACATTCAACCCAACGGACCAACTCTT

1690 1700 1710 1720 1730 1740

CGAATGCCAAAATCTGTTATGATGAGCCAAGCAATGCATAAATAAGACAACAATTGTGTT

1750 1760 1770 1780 1790 1800

TACCAACTTTGTGATAATTAGGCAATTGCTACTCTATGATTGCCCAAAACCTAAACCATG

1810 1820 1830 1840 1850 1860

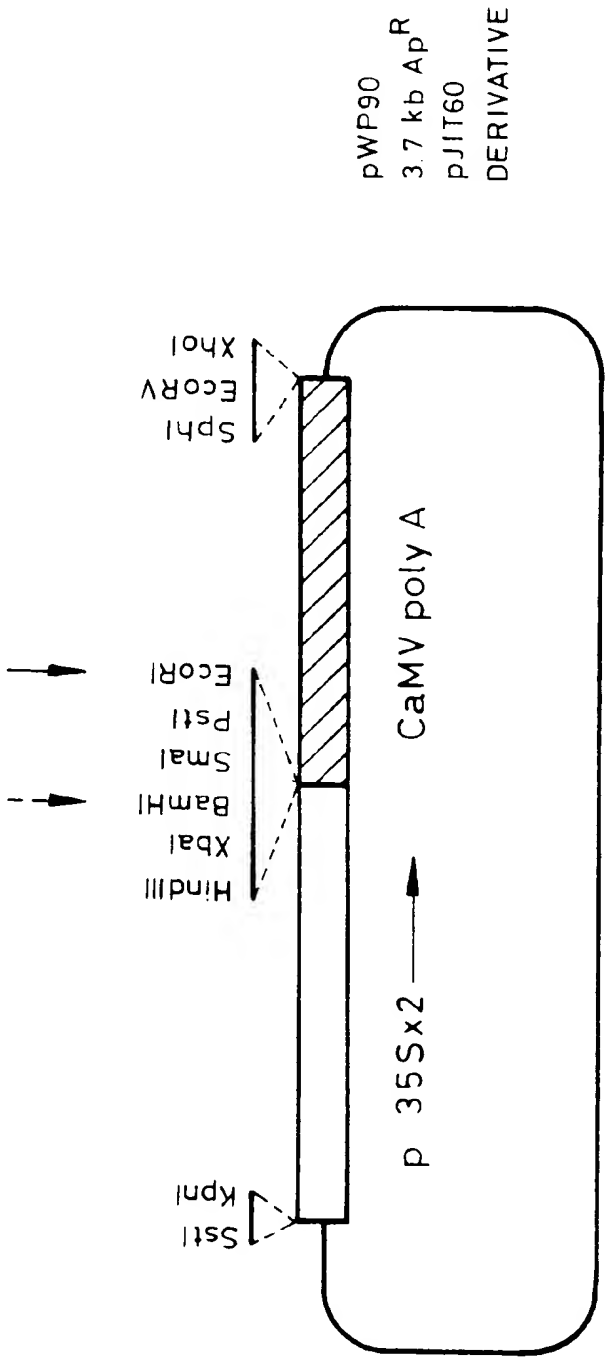
TACGACTATCATTACGTATGTTATAATTGTATATACAACTCCTTTATCTTTGACTATTTC

1870 1880 1890 1900

ATTTTATTAAAAAAAAAAAAAAAAA

FIG. 1 (CONTD)

FIG. 2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XbaI
HindIII
SstI
KpnI
p 35Sx2
CaMV poly A

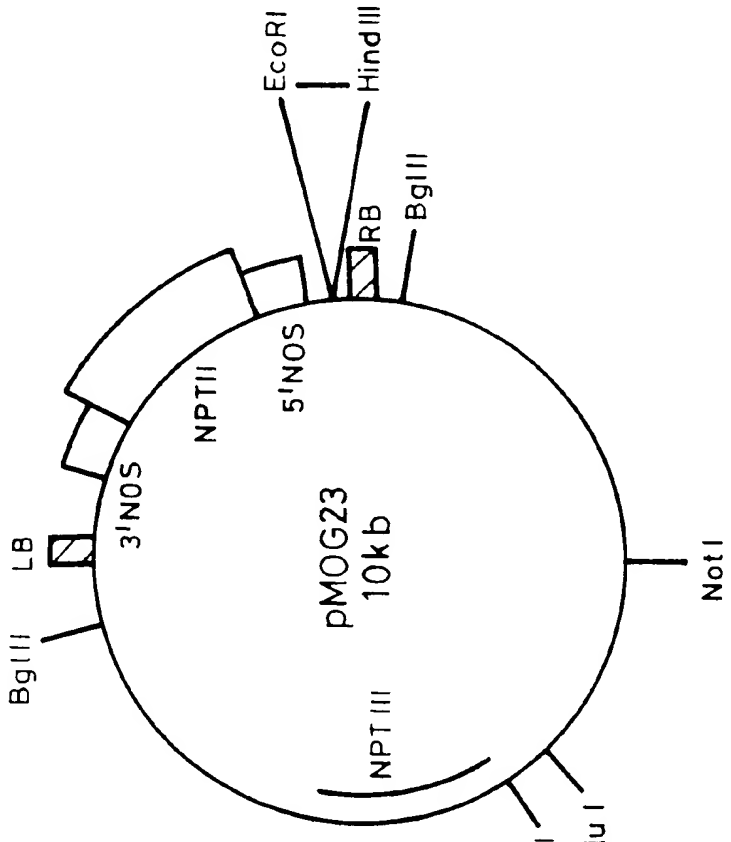


FIG. 3

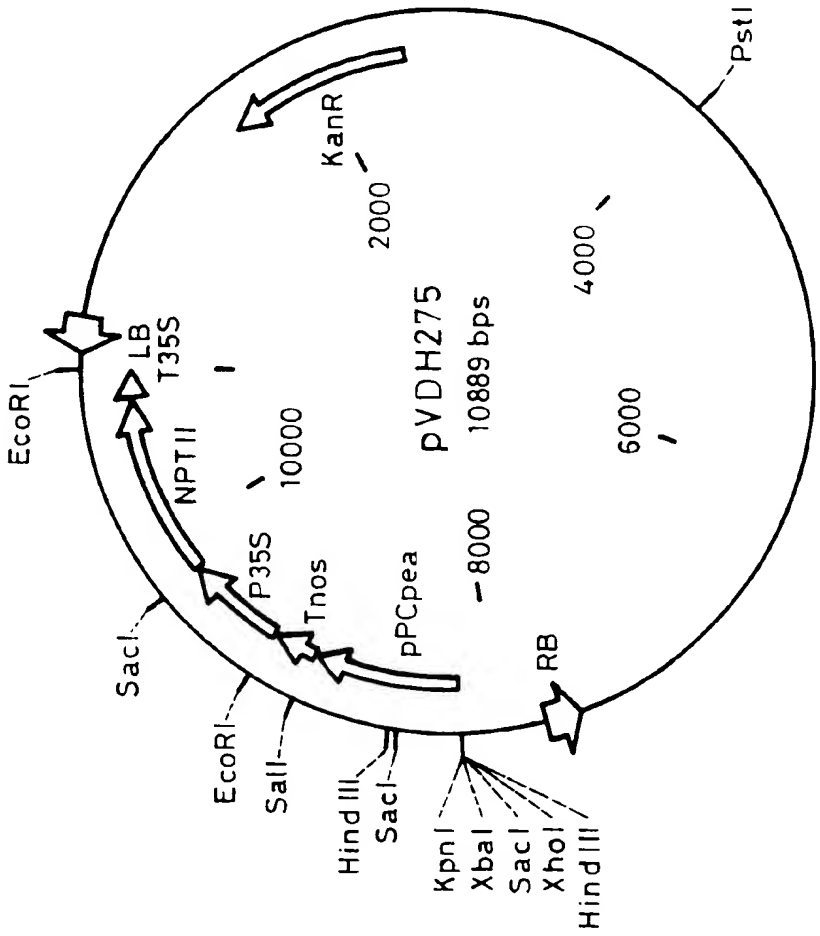
POLYLINKER SEQUENCE:

EcoRI KpnI SmaI BamHI XbaI XhoI HindIII

5' GGAATTCTGGTACCTCCCGGGAGGATCCATCTAGAGCTCGAGTAAGCTTC 3'

SacI

FIG. 4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2000
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6000
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10000
KanR
PstI
LB
T35S
NPTII
P35S
Tnos
pPCpea
RB
EcoRI
SacI
EcoRI
SalI
HindIII
SacI
KpnI
XbaI
SacI
XhoI
HindIII

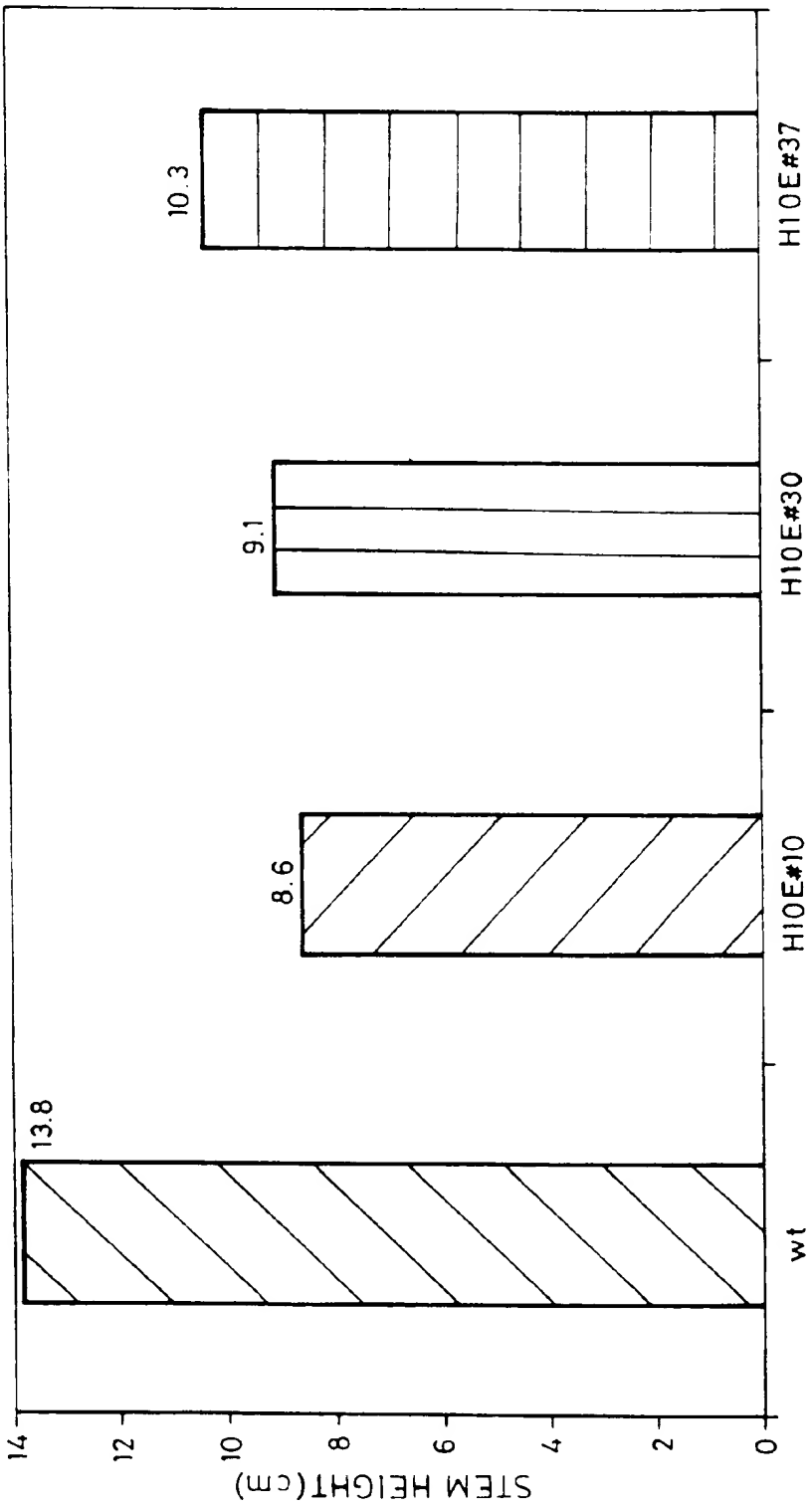


FIG. 5 AtH1 OVEREXPRESSION CAUSES A REDUCTION IN STEM ELONGATION

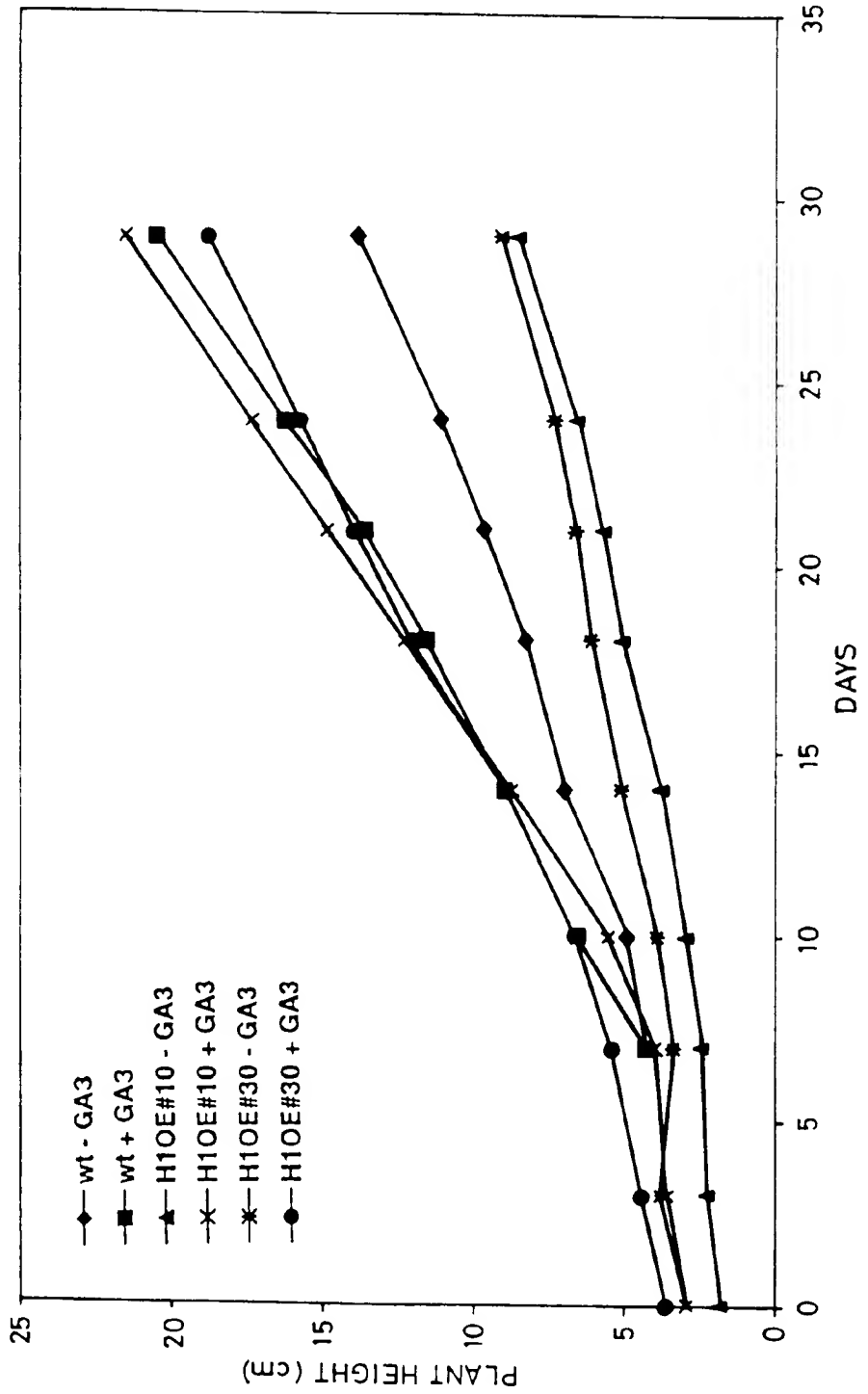
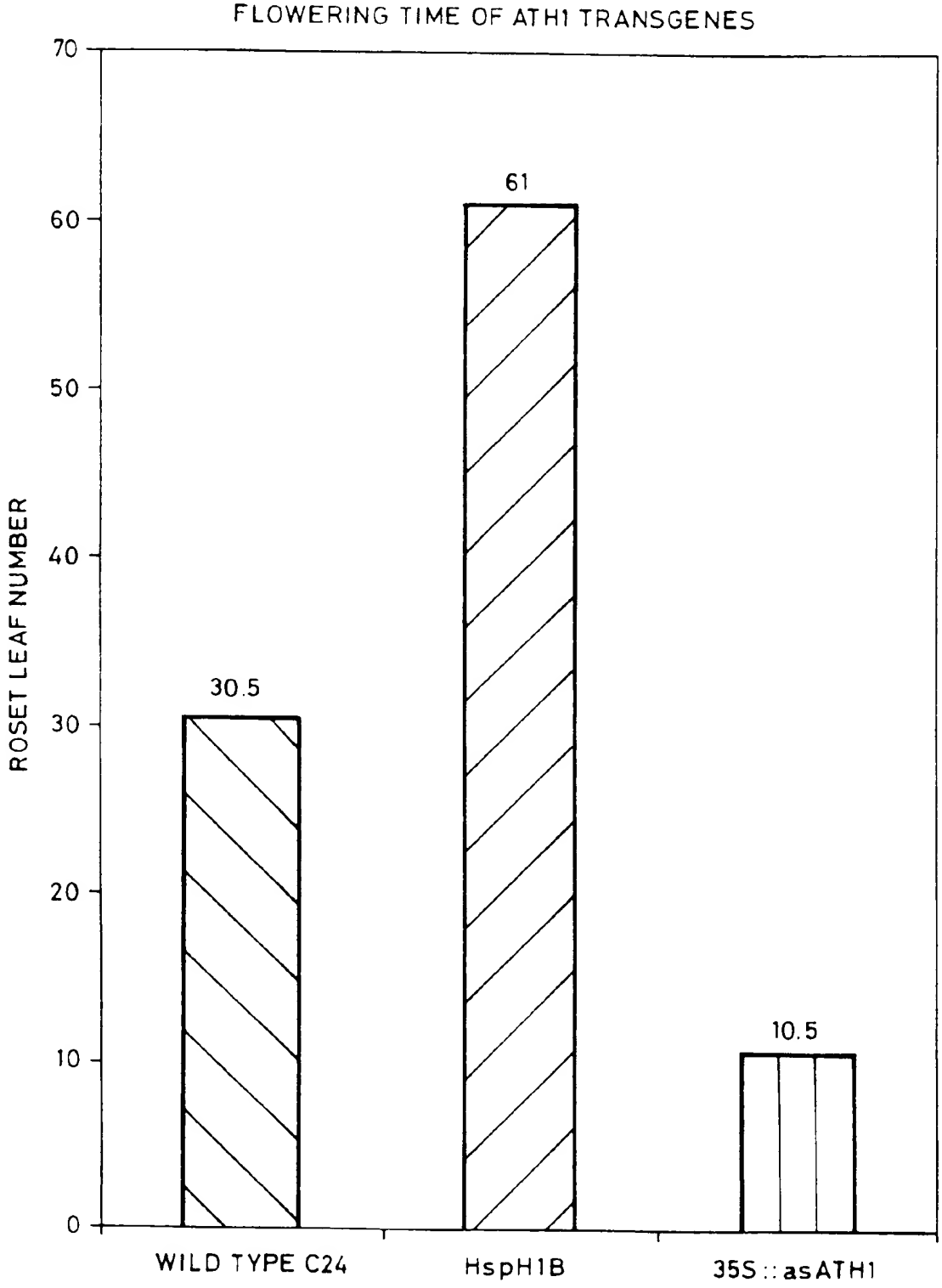


FIG.6 REVERSION OF AtH1 OVEREXPRESSION PHENOTYPE BY GA3

FIG. 7


FLOWERING TIME OF ATH1 TRANSGENES
ROSET LEAF NUMBER
70
60
50
40
30
20
10
0
30.5
61
10.5
WILD TYPE C24
HspH1B
35S::asATH1